

**A BIOLOGICAL RESOURCES SURVEY REPORT
FOR THE
SOURIS MINOR SUBDIVISION
TPM 20820, VALLEY CENTER
APN 189-012-68
COUNTY OF SAN DIEGO**

Prepared for

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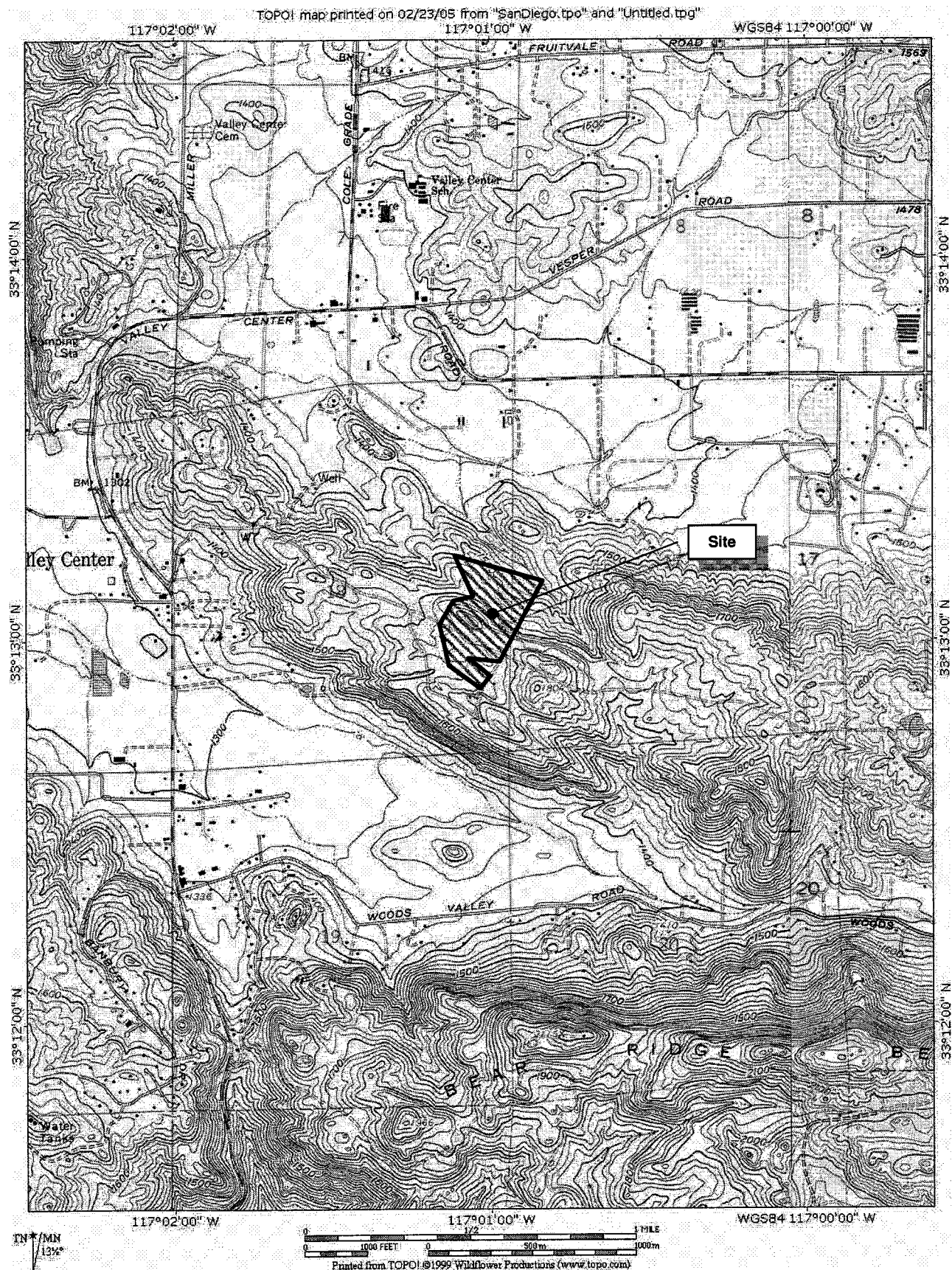
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TPM 20820
LOG NO: 04-08-016

**FIGURE 1. REGIONAL LOCATION - THE TPM 2020820 SUBDIVISION PROJECT
PORTION OF THE USGS "VALLEY CENTER" 7.5' QUADRANGLE**



INTRODUCTION

This report addresses biological resources, project impacts, and RPO/CEQA (Resource Protection Ordinance/California Environmental Quality Act) compatibility for the Souris Minor Subdivision Project, Tentative Parcel Map (TPM) 20820. The project involves the approximately 39-acre Souris property (APN 189-012-68) located off Calle de Vista in the Valley Center area of unincorporated San Diego County (Figure 1).

PROJECT AND SITE DESCRIPTION

Approval of the TPM 20820 project would result in the creation of four new legal parcels. Three new dwelling units would presumably be built; one on each new parcel (one dwelling unit currently exists on proposed parcel 3), although this application does not include any proposed grading or site improvements, and no offsite improvements are currently proposed. A temporary security guard residence is proposed for the northern portion of the site. Primary access to the property would be from the northwest off Calle de Vista.

The TPM 20820 property is located in a rural part of San Diego County, although there are homes in the vicinity, including homes on adjoining parcels. Other areas in the vicinity of the property support similar habitats, including agriculture, chaparral, sage scrub, and development.

Most of the property supports native vegetation, including scrub, chaparral, and riparian vegetation. Also present are disturbed habitat areas, including several dirt roads, an existing single family home, a trailer, etc. A significant drainage runs across the northeastern corner of the property. A second drainage is found on the southeastern portion of the site. Both of these drainages support riparian vegetation, although the habitat is best developed on the northern portion of the property. Elevations onsite range between approximately 1,410 feet MSL and 1,735 feet MSL. Soil types found onsite include Fallbrook sandy loam, Cienega course sandy loam, and Visalia sandy loam soils. These soil-types are not known to support significant populations of narrow endemics or other very rare plants or animals.

PURPOSE OF STUDY

The purpose of this study was to inventory the property for biological resources, identify and map all onsite habitats, and search for signs of rare, endangered, threatened, or otherwise sensitive plants or animals which are known from the area, and which could occur here. These data were used in an assessment of biological resource values. This analysis allows a determination of project-related direct and indirect impacts, as required by the CEQA and the RPO, and mitigation, if appropriate and necessary. It is expected that the development of the property and associated improvements will result in measurable losses of biological resource values, necessitating mitigation.

METHODS

Field surveys of the TPM 20820 property were completed in May of 2002 and October of 2004. The specific dates, personnel, and weather conditions are presented in Table 1. Investigators included the author (VS) and Shannon M. Allen, Biological Consultant (SA):

Table 1. Field Surveys – The TPM 20820 Project Site

<u>Date</u>	<u>Hours</u>	<u>Personnel</u>	<u>Conditions</u>
7 May 2002	14:45– 16:00	VS	overcast skies, temps in the mid 60°s, no wind
5 Oct 2004	14:00–16:45	VS, SA	clear skies, temps in the mid 80°s, light westerly wind 5 MPH

All plants, animals and habitats encountered during the survey periods were noted in the field. A spring biological survey and wetland survey was completed by Andrew Pignolo and Jane Higginson in May of 2004. Field data accumulated during that survey are incorporated into this report. The limits of each habitat-type were mapped in the field utilizing an aerial photograph of the property. All plants and animals identified in association with the property are listed in Table 2 at the end of this report. Plants were identified *in situ*, or based on characteristic floral parts collected and later examined in detail. Floral nomenclature used in this letter follows Hickman (1993) and others. Plant communities, as designated by numerical code, follow Holland (1996, as amended).

Wildlife observations were made opportunistically. Binoculars were used to aid in observations and all wildlife species detected were noted. Animal nomenclature used in this report is taken from Stebbins (1985) for reptiles and amphibians, American Ornithologist's Union (1983, as updated) for birds, and Jones, et. al (1992) for mammals.

RESULTS

Habitats

The majority of the TPM 20820 property supports native upland vegetation. Also present are disturbed habitat areas, including several dirt roads, a single family home, a trailer, etc. The onsite habitats (see attached Vegetation Exhibit, Figure 2) include the following:

Chamise Chaparral (Holland Code 37200) - 23.8 acres

The majority of the property supports Chamise-dominated Chaparral vegetation. This habitat is indicated by Chamise (*Adenostoma fasciculatum*), Mission Manzanita (*Xylococcus bicolor*), occasional wild lilacs (*Ceanothus*

leucodermis, *C. tomentosus*, *C. greggii*), and other woody shrubs. Chaparral dominates the higher elevations and the northern slopes of the property, with a smaller stand at the western edge of proposed parcel #4. Much of the chaparral shows signs of having been cleared and planted many years ago. Still present in the habitat are dead avocado trees and tree stakes, old irrigation lines, and grove access roads (most of which are still traversable). Brushed Chamise Chaparral is found on the slopes immediately north of the new home located on proposed parcel #3. This area was brushed as part of fuel management to protect the new structure

Diegan Coastal Sage Scrub (Holland Code #32520) - 4.8 acres

The inland form of Diegan Coastal Sage Scrub (CSS) vegetation is found on the southern portion of the property on proposed parcel #4. Indicators in this habitat include Flat-top Buckwheat (*Eriogonum fasciculatum*), California Sagebrush (*Artemisia californica*), Laurel Sumac (*Malosma laurina*) and other soft-woody shrubs. This habitat continues offsite to the south on adjoining properties. Disturbed Coastal Sage Scrub is found in two places; south of Street "A" near the western portion of the property in an area that supports a small structure, ornamental plantings, etc. and near the northeastern corner of proposed parcel #4

Coastal Sage - Chaparral Scrub (Holland Code #37G00) - 3.6 acres

Coastal Sage - Chaparral Scrub vegetation (CSCS), an ecotonal community indicated by approximate equal number of hard-woody (chaparral) and soft-woody (CSS) species, is found on the south-facing slopes immediately north of Street "A". Indicators in this transitional community include California Sagebrush, Chamise, Mission Manzanita, Flat-top Buckwheat, and others. Coastal Sage - Chaparral Scrub is categorized as a "chaparral" habitat-type as defined by Holland (37000 series)

Southern Coast Live Oak Riparian Forest (Holland Code #61310) - 0.5 acres

Mature riparian forest vegetation is present in the northeastern corner of the property. Indicators in this habitat include willows (*Salix*), California Sycamores (*Platanus racemosa*), and Coast Live Oaks (*Quercus agrifolia*). Most of this habitat is actually located offsite, although the property corner supports a small amount of forest. This portion of the site may be protected in existing open space.

Non-native Grassland (Holland Code 42200) - 1.6 acres

Non-native Grassland (NNG) is found on the southern portion of the site in old disturbed areas that have regrown with weedy annuals. Indicators observed include various Bromes (*Bromus* spp.), Perennial Mustard (*Brassica geniculata*), and other weedy species. Some of this area appears to have been impacted by recent construction, although it is mapped as NNG for analysis purposes.

Southern Willow Scrub (Holland Code #63320) - 0.4 acres

Two small patches of Southern Willow Scrub vegetation are found on proposed parcel #4. This habitat is indicated by small stands of willows growing in a seasonally-wet area along an RPO wetland (see below). The more northerly stand has been disturbed with a small vegetable garden, trenching, etc.

Tamarisk Scrub (Holland Code #63810) - trace

A tiny patch of Tamarisk Scrub vegetation is found on the southern portion of the property within the RPO wetland. This habitat is indicated by Salt Cedar (*Tamarix*), a non-native wetland tree. Only a trace amount (approximately 0.02 acre) of this habitat is found onsite.

Urban/Developed (Holland Code #12000) - 2.4 acres

"A" Street, which forms the site's access road off Calle de Vista, qualifies as supporting Urban/Developed habitat. Developed habitat is also found in association with the new home on the eastern edge of the site, surrounding the small structure at the western end of the site, and offsite to the southeast on the adjoining property. These areas are mostly unvegetated or planted with ornamental landscape species.

Disturbed Habitat (Holland Code #11300) - 1.9 acres

The site contains several dirt roads and small pads that qualify as supporting Disturbed Habitat. These areas support only low weeds and/or barren soil. As mentioned, much of the property was formerly planted as a failed grove, and these mostly represent the residual cleared areas associated with this operation.

Orchards and Vineyards (Holland Code #18100) - offsite

Groves are located offsite to the northwest and southeast. These areas qualify as supporting Orchards and Vineyards habitat.

Plants

One hundred and nineteen species of vascular plants were detected on the TPM 20820 property. This includes spring annuals that were detected in May of 2004. The plant species observed typify the diversity normally found in chaparral, scrub, riparian, and disturbed areas in the interior part of San Diego County. A complete list of the plants detected, listed alphabetically, can be found in Table 2, attached. This list would be expected to represent at least 80 percent of the naturalized plants occurring on this site.

Animals

Forty-one species of animals were observed using the project site. These are generally common species, abundant in the site's general vicinity. Animals observed onsite are listed in Table 2, attached. Six of the animals observed are considered sensitive in San Diego County. These are discussed subsequently.

SENSITIVE RESOURCES

Sensitive Vegetation Communities

Vegetation communities (habitats) are generally considered "sensitive" if; (a) they are recognized by the County's Resource Protection Ordinance as being generally depleted; (b) they are considered rare within the region by local experts, (c) they are known to support sensitive animal or plant species; and/or (d) they are known to serve as important wildlife corridors. These sensitive habitats are typically depleted throughout their known ranges, or are highly localized and/or fragmented.

The following habitats found on the TPM 20820 site are considered sensitive:

- Chamise Chaparral
- Diegan Coastal Sage Scrub
- Coastal Sage – Chaparral Scrub
- Southern Willow Scrub
- Southern Coast Live Oak Riparian Forest

All of these habitats are of moderate to high biological resource value, and/or support (or partially support) sensitive species of wildlife.

Wetlands

Wetland habitats are present in two disjunct areas of the site. The California Department of Fish and Game-defined (CDFG), U. S. Army Corps of Engineers (ACoE), and County of San Diego (pursuant to the RPO) all define wetlands on the basis of various indicators.

Article II, (16) of the Resource Protection Ordinance defines "Wetlands" as follows.

"All lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are "wetlands":

- a. *At least periodically, the land supports predominantly hydrophytes (plants whose habitat is water or very wet places);*
- b. *The substratum is predominantly undrained hydric soil; or*
- c. *The substratum is non soil and is saturated with water or covered by water at some time during the growing season of each year."*

An RPO wetland survey was completed for this project. All drainages and low-lying areas were examined in the field for the presence of wetland indicators, including hydrophytes, hydric soils, and hydrology features that are used to define RPO wetlands. The results of this study are illustrated on the project vegetation exhibit. The areas mapped as Southern Willow Scrub, Tamarisk Scrub, and Southern Coast Live Oak Riparian Forest qualify as RPO wetlands. However, the State of California (CDFG, others) also recognizes "wetlands" based on similar criteria to the County of San Diego pursuant to the RPO. Only one of the three criteria must be present in order to delineate an area as a "state wetland" or County-defined wetland. For this reason, all of the onsite RPO wetlands also qualify as state (CDFG) wetlands and "waters of the state".

The Southern Coast Live Oak Riparian Forest onsite probably also qualifies as a "federal" wetland, as defined by the Army Corps of Engineers and other federal agencies. Identifying federal wetlands would require a formal delineation. However, because the threshold for county and state wetlands is lower than that required to identify wetlands as federally defined, any federal wetlands would be included in the areas identified as CDFG and RPO wetlands.

All measurable direct or indirect wetland impacts are subject to permitting by various state and federal agencies, as well as the County of San Diego. Impacts normally trigger the need for "no net loss" mitigation, a 1600 Streambed Alteration Agreement with the CDFG, and Water Quality Certification from the California Regional Water Quality Control Board pursuant to the Clean Water Act/Porter-Cologne Act. For this reason, the onsite wetland areas are recommended for avoidance and open space protection. This is discussed in more detail subsequently.

Wildlife Corridor Evaluation

Local wildlife corridors are found on portions of TPM 20820 site. Local corridors facilitate wildlife movement from nesting or sheltering areas to nearby sources of food, water, or similar daily necessities. Numerous species use portions of TPM 20820 property as corridors linking seasonal water sources with on and off areas. As previously described, this property supports several unnamed drainages. Mammals recorded using this property include Bobcat (*Lynx rufus*), Coyote (*Canis latrans*), Gray Fox (*Urocyon cinereoargenteus*), and others. The presence of graded but rarely driven dirt tracks and roads through portions of the property provides ready access for large mammals, which tend to prefer open ridges, roads, and tracks to avoid areas of extremely dense brush or difficult terrain. However, wildlife does shelter in areas of dense brush or in areas with a heavy cover, as are present on the portions of the site's northern slopes.

The project as designed preserves local wildlife corridors along the northern and southern ends of the site. Local corridors are also preserved along the site's drainages. These will allow the passage of wildlife from remote areas into the northern and southern sections of the property. Because of the relatively low density of development, wildlife passage across these portions of the site should also be retained by design.

Sensitive Plants

No sensitive plants were observed on the TPM 20820 property during the field surveys. Sensitive plants are those listed as "Rare", "Endangered", "Threatened", "of Special Concern", or otherwise considered noteworthy by the MSCP, the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the California Native Plant Society (CNPS), or other conservation agencies, organizations, or local botanists. A number of sensitive plant species are known to occur in the general vicinity of this property, however, and some of these could occur onsite. These are listed and discussed in Table 4.

Sensitive Animals

Six species of sensitive animals were observed on the TPM 20820 project site. These are Turkey Vulture, Bewick's Wren, Bobcat, Orange-throated Whiptail, Coastal Whiptail, and San Diego Coast Horned Lizard. Sensitive animals are those listed as "Rare", "Endangered", "Threatened", "of Special Concern" or otherwise noteworthy by the California Department of Fish and Game, the U.S. Fish and Wildlife Service, the National Audubon Society, the County of San Diego, or other conservation agencies, organizations, or local zoologists.

Turkey Vulture (*Cathartes aura*)

Status: "Blue-list" (Tate, 1986)

"Declining" (Unitt, 1984)

Sensitive Bird List (County of San Diego, 1994)

Distribution: Ranges from southern Canada to Argentina.

Habitat(s): Open areas, farmlands, and grasslands. Usually seen soaring overhead or perched on poles, dead trees, or on the ground

Status On site: Two specimens observed soaring over the property and adjacent lands. Nesting habitat not present onsite, therefore not anticipated as a nesting species.

Bewick's Wren (*Thryomanes bewickii*)

Status: "Blue List" (Tate, 1986)

Federal/State status: none

Distribution: Occurs from the central and western-half of North America, from British Columbia and Ontario to south-central Mexico.

Habitat(s): Resident in brushy thickets, chaparral, piñon, juniper, other dense habitats

Status On site: Several Bewick's Wrens were observed onsite. Most were associated with brushy areas, moving about the site and flying offsite to adjoining properties to the north.

Comments: This species is a common resident in San Diego County. Specimens probably nest onsite in dense areas.

Bobcat (*Lynx rufus*)

Status: Regulated Furbearer (CDFG, 1999).

Federal status: none

Distribution: Southern Canada to central Mexico.

Habitat(s): Brushy areas, including chaparral, sage scrub, woodlands, and forests. Rarely seen during daylight hours. Secretive and often occurs on properties without being readily detected.

Status On Site: Scats and tracks observed in various areas, indicating movement throughout most of the property.

Orange-throated Whiptail (*Cnemidophorus hyperythrus beldingi*)

Status: "Threatened" (San Diego Herpetological Society, 1980)

"Species of Concern" (USFWS, 1998)

"California Species of Special Concern" (CDFG, 1994)

Sensitive Reptile List (County of San Diego, 1994)

Distribution: Restricted to extreme southwestern California, where it ranges from Orange and Riverside Counties south into northern Baja California.

Habitat(s): Occurs in a variety of habitats; CSS, CSCS, open chaparral, and xeric riparian areas. Primary requirements include the presence of termites, open areas for foraging and thermoregulation, and friable soils.

Status On site: Two specimens observed in the sage scrub on the southern and western ends of the property.

Coastal Western Whiptail (*Cnemidophorus tigris multiscutatus*)

Status: Federal Status: "Species of Concern"

State status: none

Sensitive Reptile List (County of San Diego, 1994)

Distribution: Cismontane areas of California from the border to central California

Habitat(s): Open areas in a variety of habitats, such as chaparral, sage scrub, desert scrub. Requires open areas and friable soils.

Status On Site: Single specimens observed onsite in southern portion of site near rock outcrop. Likely well distributed on this property, and common in the vicinity of the site.

San Diego Coast Horned Lizard (*Phrynosoma coronatum blainvillei*)

Status: "Species of Concern" (USFWS, 1998)

"California Species of Special Concern" (CDFG, 1994)

Federal Status: "Species of Concern"

Sensitive Reptile List (County of San Diego, 1994)

Distribution: Ventura County south into northern Baja California Norte. Specimens found from sea level to mountain elevations and down desert slopes to the edge of the low desert.

Habitat(s): Open sage scrub, grassland, forested areas and chaparral.

Status On site: A single juvenile specimen was observed onsite near the northern property edge.

Other sensitive animals known from the general vicinity of the property are listed in Table 4. A few of these probably occur onsite, at least on an occasional basis, particularly certain wide-ranging foragers, such as various species of rare bats, various species of raptors, other rare reptiles etc.

California Gnatcatcher Habitat Evaluation

California Gnatcatcher (*Poliioptila californica*), a federally-listed Threatened Species, is known from habitat superficially similar to that found on the TPM 20820 site. Gnatcatchers occur in coastal and interior areas of coastal sage and related scrub habitats typically dominated by California Sagebrush, Flat-top Buckwheat, Laurel Sumac, and other soft-woody shrubs.

A directed Habitat Evaluation for this species was completed during the October 2004 field survey. Although the site supports CSS and CSCS, which are known to support California Gnatcatchers, the elevations onsite (ca. 1,400 to 1,700 feet MSL) are at the upper elevational limits of those normally associated with this species. Gnatcatchers normally occur at lower elevations, although they can occur at higher elevations in sheltered locations. Also, there are no locality records for this species from the vicinity, with the nearest sighting many miles to the south. The small amount of scrub vegetation found onsite (8.4 acres) would not be sufficient to support gnatcatchers in any case, and this habitat adjoins development at this location. For these reasons, the property is considered unlikely to support this threatened songbird.

PROJECT IMPACTS

Impacts to biological resources associated with the TPM 20820 project are assessed as being either "significant" or "less than significant", as defined by CEQA. The determination of impact significance is based on one or all of the following criteria:

- have a substantial adverse effect on sensitive habitats, species, or raptor foraging or wildlife movement
- or--
- reduce the ability of the County to implement existing or future conservation programs
- or--
- are out of conformance with applicable ordinances, policies and habitat conservation plans.

Anticipated impacts to habitats were calculated by determining the acreage of each habitat affected by the site development, including future grading, estimated brush clearing for fire protection, and pad grading/home construction, as expected to occur in the future. These are summarized in Table 3.

Measurable direct impacts would result from the development of TPM 20820 project site. Direct impacts result from the actual removal of habitat, plants, and animals from the site through grading and brushing clearing or thinning for fire protection purposes, agriculture, etc. These direct impacts are considered permanent, because they result in a conversion of habitats to landscaped areas, structures, roads, etc. Indirect impacts also affect plants, animals, and habitats that occur on or near the project site. These are not the direct result of grading or development. Examples of indirect impacts include introduction of exotic species, human or pet intrusions into natural areas, lighting, traffic, and noise. Indirect impacts are often called "edge effects".

An impact analysis associated with the various onsite habitats is presented in tabular format in Table 3. This analysis assumes that the parcels are developed in the future as currently proposed, with homes on the pads shown on the preliminary grading plans.

Direct Impacts

Future development of the TPM 20820 project site, as presently proposed, could result in the direct impacts that follow. The numbers below were derived by calculating the acreage of the proposed roads, driveways, leach fields, pads, and fire clearing areas, and the adoption of an onsite open space easement, as discussed subsequently:

- (1) Up to 5.4 acres of intact and disturbed Chamise Chaparral (CC) would likely be impacted as a result of site development. The loss of this habitat is considered "significant", as defined by CEQA. Mitigation for this loss is required under CEQA and the RPO.
- (2) Up to 1.0 acre of intact and disturbed Diegan Coastal Sage Scrub (CSS) would likely be impacted as a result of site development. The loss of this habitat is considered "significant", as defined by CEQA. Mitigation for this loss is required under CEQA and the RPO.
- (3) Up to 3.6 acres of Coastal Sage - Chaparral Scrub (CSCS) would likely be impacted as a result of site development. The loss of this habitat is considered "significant", as defined by CEQA. Mitigation for this loss is required under CEQA and the RPO.
- (4) Impacts to Southern Willow Scrub (SWS), Southern Coast Live Oak Riparian Forest (SCLORF), and Tamarisk Scrub can be avoided by design. As proposed, assuming the adoption of an open space easement, the impacts to these sensitive wetland habitats will be "less than significant", as defined by CEQA. Specific mitigation is required under CEQA and the RPO.
- (5) Up to 0.9 acre of Non-native Grassland could be impacted as a result of site development. The loss of this habitat is considered "less than significant", as defined by CEQA. However, the County requires mitigation for this loss pursuant to CEQA.
- (6) Impacts to Disturbed Habitat, and Urban/Developed Habitat are considered "less than significant", as defined by CEQA and the RPO. Mitigation for the loss of these habitats is not required.
- (7) Development will result in the direct loss of occupied habitat for several sensitive species, including Turkey Vulture, Bewick's Wren, Bobcat, Orange-throated Whiptail, Coastal Whiptail, and San Diego Coast Horned Lizard. Also lost will be habitat presumably supporting various other sensitive species. The loss of sensitive species in the aggregate is considered "significant", as defined by CEQA. However, habitat-based mitigation will be provided for this impact (indirectly) through protection of native vegetation that theoretically supports these species, pursuant to County policy.
- (8) Impacts to local wildlife corridors are considered "less than significant". This is because the project as proposed retains corridor function adjacent to local water supplies along the northern and southern portions of the property.

Indirect Impacts

Indirect impacts resulting from changes in land use are anticipated. These are primarily edge effects impacting natural areas and adjoining offsite areas. The uses of trails through and along open space areas are one type of edge effect. Other edge effects include lighting or drainage discharge into natural areas, domestic pets that roam into the habitat, etc. Indirect impacts associated with site development (primarily edge effects due to fragmentation of the habitat) are considered "less than significant." This is because most areas adjoining the proposed development portion of the site are currently developed in a manner similar to that being proposed. Therefore, edge effects from existing development have already degraded the habitat to a degree.

Cumulative Impacts

According to Section 15130(a) of the State CEQA Guidelines, cumulative impacts must be discussed when project impacts, even though individually limited, are cumulatively considerable. Cumulatively considerable means the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, other current projects, and probable future projects.

At this time, the majority of the TPM 20820 project site supports native chaparral and other native habitats (CSCS, CSS, and NNG) of varying habitat values. Several dirt grove roads occur within native habitat. These dirt roads were used to access agricultural areas in the past. One home is located on the site.

As part of the proposed TPM 20820 project, three new residential pads and driveways would be constructed. A temporary security guard residence and septic fields are also proposed for the northern portion of the site on proposed Parcel 2. All of the proposed residence sites (other than the temporary security guard residence) would take direct access off the extension off Calle de Vista. An existing home is present on proposed parcel 3. No new improvements are proposed for this parcel. In total, the new improvements, including brush management, will result in impacts to approximately 1 acre of CSS, 3.6 acres of CSCS, 5.4 acres of CC, and 0.9 acres of NNG

If the TPM 20820 project was not approved, direct impacts to native habitats could be avoided, and no incremental (albeit very minor) contribution to the regional cumulative resource loss would be realized. However indirect impacts could still degrade the habitat as a result of "edge effects". This is due to the fact that the development area of the site adjoins existing rural residential development. the owner of this property could clear up to 5 acres of habitat without any permits, so long as wetland areas were avoided. Although build-out of all near-term projects would clearly result in cumulative biological impacts, the small size of the development area of this site would limit impacts from a regional perspective. Therefore cumulative impacts associated with TPM 20820 are considered "less than significant".

The following findings relate to the TPM 20820 project's contribution to the regional cumulative resource loss:

1. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

RESPONSE: The 20820 project will not have any substantial adverse effect on any candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Although several sensitive species are present onsite, the effects of project implementation on these species are measurably minor, with full mitigation being provided in compliance with County, state, and federal policy.

2. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

RESPONSE: The TPM 20820 project will not have any substantial adverse effect on any riparian habitat. It will have an adverse (but minor effect) on four upland habitats: Coastal Sage Scrub, Non-native Grassland, Chamise Chaparral, and Coastal Sage – Chaparral Scrub. Onsite mitigation will be provided to adequately compensate for the adverse effect of site development.

3. *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal filling, hydrological interruption, or other means?*

RESPONSE: The TPM 20820 project does not support any federally protected wetlands as defined by Section 404 of the Clean Water Act. Therefore, no wetland impacts will be realized.

4. *Would the project conflict with any local policies or ordinances protecting biological resources?*

RESPONSE: The TPM 20820 project does not conflict with any local policies or ordinances protecting biological resources. Any project impacts that result in a loss of biological resource values will be mitigated for in full compliance with the County's Resource Protection Ordinance, the Habitat Loss Permit ordinance, and any other relevant policies or ordinances relating to biological resources.

5. *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

RESPONSE: The TPM 20820 project does not conflict with any provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans. The County is currently preparing a Subarea NCCP plan for the

area surrounding and including this property. This plan does not identify the development areas of the TPM 20766RPL1 project site as being subject to habitat conservation. The proposed development of this site will therefore be in full compliance with this or any other future habitat conservation plan insofar as all project impacts are mitigated to the full extent feasible.

6. *Does the project have impacts that are individually limited, but cumulatively considerable?*

RESPONSE: The TPM 20820 project does not have impacts that are individually limited, but cumulatively considerable. This is because all impacts are relatively minor, and fully mitigated onsite in compliance with County policy, CEQA, and the Resource Protection Ordinance.

MITIGATION

Development of the TPM 20820 property will result in a direct loss of sensitive habitat, as defined by CEQA and the RPO (Table 3). Mitigation is thus required to ensure that there is no loss of sensitive habitat values or degradation of significant natural areas as a result of future site improvement. To that end, it is recommended that a portion of the property be placed into perpetual protection within a **Dedicated Biological Open Space Easement** (Figure 2) intended to preclude the removal or addition of any thing, including structures and vegetation. This easement should be fenced and/or clearly marked with high visibility markers (at 100-foot intervals) along its length to discourage entry into the natural area. This should limit encroachment from development without impeding wildlife movement within the easement. A **Wetland Buffer** of between 50' and 100' in width is contained within the Biological Open Space Easement. A second **Limited Building Zone Easement (LBZ)**, which provides up to a 100-foot fire clearing structural setback from the edge of the biology open space, should be incorporated into the project design. This easement should prohibit the construction of structures that could require additional fire clearing, etc. The structural setback easement will preclude fire clearing which otherwise might encroach into the biology open space. Table 3 presents an impact/mitigation analysis on a habitat-by-habitat basis, based on the adoption of this easement system.

Although the project will impact a total of 10.0 acres of brush-dominated habitat (5.4 acres of CC, 3.6 acres of CSCS, and 1 acre of CSS), it conserves 20.2 acres of similar-functioning habitat in open space, including CC, CSS, NNG, and riparian vegetation. The shortage of ecotonal CSCS required to mitigate "in kind" for impacts to 3.6 acres of that habitat (see Table 3) will be compensated for via the conservation of excess areas of CC and CSS (beyond that required for "in kind" compensation), as well as riparian vegetation, to be placed in the above Dedicated Biological Open Space Easement. This is biologically-sound because the CSCS being impacted is transitional between CC and CSS in species composition, habitat density, and biological functionality. The same species of fauna utilize all three of these habitat-types, as all provide cover and forage for brush-dwelling species. By placing larger areas into open space, the habitat values and functions of the CSCS being impacted are conserved.

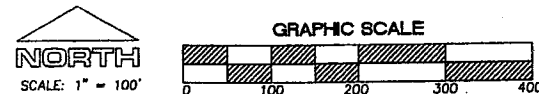
Site brushing, grading, and/or the removal of native vegetation or the removal of vegetation within 300 feet of any known migratory songbird nesting location will not be permitted during the spring/summer songbird breeding season, defined as from 15 February to 31 August of each year. This is required in order to ensure compliance with the federal Migratory Bird Treaty Act, which prevents the "take" of eggs, nests, feathers, or other parts of most native bird species. Limiting activities to the non-breeding season will minimize chances for the incidental take of migratory songbirds or raptors. Should it be necessary to conduct brushing, grading, or other construction activities during the songbird breeding season, a preconstruction nesting survey of all areas within 300 feet of the proposed activity will be required. The results of the survey will be provided in a report to the Director, Department of Planning and Land Use and the Wildlife Agencies for concurrence with the conclusions and recommendations.

Pursuant to Habitat Loss Permit Ordinance #8365 of the San Diego County Code, the applicant may be required to obtain a Habitat Loss Permit (HLP) to "cover" impacts to the CSS habitat onsite. The site supports a quantity of this vegetation that would be impacted by development.

FIGURE 2. BIOLOGICAL RESOURCES & OPEN SPACE EASEMENT – TPM 20820, VALLEY CENTER

CALC-MASTER DWG.

1-26-04



VEGETATION EXHIBIT

SOURIS PROPERTY
TPM 20820
APN 189-012-68
Valley Center

LEGEND

- Chamise Chaparral (Holland Code #37200)
- Coastal Sage - Chaparral Scrub (Holland Code #37000)
- Dregan Coastal Sage Scrub, Inland Form (Holland Code #32520)
- disturbed Coastal Sage Scrub (Holland Code #82500)
- brushed Chamise Chaparral (Holland Code #37200)
- Orchards and Vineyards (Holland Code #18100)
- Southern Coast Live Oak Riparian Forest (Holland Code #61310)
- Southern Willow Scrub (Holland Code #63320)
- Urban/Developed (Holland Code #12000)
- Disturbed Habitat (Holland Code #11300)
- Non-native Grassland (Holland Code #42200)
- Tamarisk Scrub (Holland Code #63810)
- San Diego Coast Horned Lizard

not shown:
Turkey Vulture (soaring over site)
Bewick's Wren (common in dense areas of chaparral)
Bobcat (scats indicating movement over most of site)
Orange-throated Whiptail (southern portion of site)
Coastal Whiptail (southern portion of site)

- PROPOSED BIOLOGICAL OPEN SPACE EASEMENT
- PROPOSED LIMITED BUILDING ZONE EASEMENT

Prepared by:

VINCENT N. SCHEIDT, MA
CERTIFIED BIOLOGICAL CONSULTANT

SHANNON M. ALLEN, BA
BIOLOGICAL CONSULTANT

3158 Occidental Street • San Diego, CA 92122 • (619) 457-3873

SECURITY GUARD TEMPORARY RESIDENCE
& ACCESS AREA TO BE EXCLUDED FROM
OPEN SPACE EASEMENT

PM 6538

PAR 4

EXISTING 40' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
AS F/P 2004-0025636

EXISTING 60' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
AS F/P 2004-0025636

EXISTING 30' VCMWD
EASMT REC. 3-19-69
AS F/P 48192

EXISTING 60' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
AS F/P 2004-0025636

EXISTING 40' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
AS F/P 2004-0025636

PARCEL 2
2.50 AC. GROSS
2.17 AC. NET

PARCEL 1
4.18 AC. GROSS
4.01 AC. NET

PARCEL 3
5.15 AC. GROSS
5.2 AC. NET

PARCEL 4
8.67 AC. GROSS
8.15 AC. NET

"ALLOWABLE USE"
ACCESS FOR MAINTENANCE &
INSTALLATION OF LEACH FIELDS

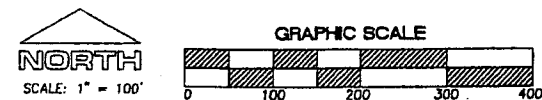
LEACH FIELD AREA
TO BE EXCLUDED
FROM OPEN SPACE
EASEMENT

REV. 5-3-06

J.B.M.	WEI JOB NO. 02-082	1/26/04
PRIVATE CONTRACT		
CALC. DRAWING		
SOURIS TENTATIVE PARCEL MAP		
A.P.N. 189-012-68		
CAL. COORD. INDEX: XXX-XXXX		
ENGINEER OF WORK:	CHECKED BY:	SHEET
GARY R. WYNN, PE CD43202	APPROVAL DATE:	1 OF 1

CALC-MASTER DWG.

1-26-04



VEGETATION EXHIBIT

SOURIS PROPERTY
TPM 20820
APN 189-012-68
Valley Center

LEGEND

- | | |
|---|---|
| = Chamise Chaparral (Holland Code #37200) | = Southern Willow Scrub (Holland Code #63320) |
| = Coastal Sage - Chaparral Scrub (Holland Code #37300) | = Urban/Developed (Holland Code #12000) |
| = Diegan Coastal Sage Scrub, inland form (Holland Code #32520) | |
| = disturbed Coastal Sage Scrub (Holland Code #62500) | = Disturbed Habitat (Holland Code #11300) |
| = brushland Chamise Chaparral (Holland Code #37200) | = Non-native Grassland (Holland Code #42200) |
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not shown:
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- = PROPOSED BIOLOGICAL OPEN SPACE EASEMENT
- = PROPOSED LIMITED BUILDING ZONE EASEMENT
- Prepared by:

VINCENT N. SCHEIDT, MA
CERTIFIED BIOLOGICAL CONSULTANT

Shannon M. Allen, BA
BIOLOGICAL CONSULTANT

3158 Occidental Street • San Diego, CA 92122 • (858) 457-3873

PM 10638
PAR 4
(729.44' PER PM 10638)

[[N84°30'02"E 1334.90']]
PM 3515
PAR 1

SECURITY GUARD TEMPORARY RESIDENCE
& ACCESS AREA TO BE EXCLUDED FROM
OPEN SPACE EASEMENT
PM 6538
PAR 4

EXISTING 40' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
AS F/P 2004-0025636

EXISTING 60' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
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EXISTING 30' VCMWD
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EXISTING 40' PRIVATE
ROAD & UTILITY EASEMENT
PER DOC. REC. 1-13-04
AS F/P 2004-0025636

PARCEL 2
50 AC. GROSS
21.47 AC. NET

PARCEL 1
4.18 AC. GROSS
4.01 AC. NET

PARCEL 3
5.15 AC. GROSS
5.12 AC. NET

PARCEL 4
8.67 AC. GROSS
8.15 AC. NET

"ALLOWABLE USE"
ACCESS FOR MAINTENANCE &
INSTALLATION OF LEACH FIELDS

LEACH FIELD AREA
TO BE EXCLUDED
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A.P.N. 189-012-68		
CAL. COORD. INDEX: XXX-XXXX		
ENGINEER OF WORK:	CHECKED BY:	SHEET
GARY R. WYNN, PE CD43202	APPROVAL DATE:	1 OF 1

TABLE 2. FLORA AND FAUNA DETECTED –TPM 20820 PROJECT

<u>Scientific Name</u>	<u>Common Name</u>
<u>Plants</u>	
<i>Acacia</i> sp. *	Acacia
<i>Adenostoma fasciculatum</i>	Chamise
<i>Amaranthus albus</i> *	White Tumbleweed
<i>Ambrosia psilostachya</i>	Western Ragweed
<i>Amsinckia intermedia</i>	Fiddleneck
<i>Antirrhinum nuttallianum</i>	Nuttall's Snapdragon
<i>Apiastrum angustifolium</i>	Mock Parsley
<i>Artemisia californica</i>	California Sagebrush
<i>Avena barbata</i> *	Slender Wild Oat
<i>Baccharis glutinosa</i>	Mule Fat
<i>Baccharis pilularis</i>	Coyote Brush
<i>Baccharis sarothroides</i>	Broom Baccharis
<i>Brassica geniculata</i> *	Perennial Mustard
<i>Brassica nigra</i> *	Black Mustard
<i>Brickellia californica</i>	California Brickellbush
<i>Bromus rubens</i> *	Foxtail Brome
<i>Camissonia bistorta</i>	Southern Sun Cup
<i>Carduus tenuiflorus</i> *	Italian Thistle
<i>Ceanothus crassifolius</i>	Thick-leaved Ceanothus
<i>Ceanothus greggii</i> ssp. <i>perplexans</i>	Cupleaf Ceanothus
<i>Ceanothus leucodermis</i>	Buck-brush Lilac
<i>Ceanothus tomentosus</i>	Ramona Lilac
<i>Centaurea melitensis</i> *	Tocalote
<i>Centaurium venustum</i>	Canchalagua
<i>Cerastium glomeratum</i> *	Mouse-ear Chickweed
<i>Cercocarpus minutiflorus</i>	San Diego Mountain Mahogany
<i>Chaenactis glabriuscula</i>	Yellow Pincushion
<i>Chaenactis artemisiaefolia</i>	White Pincushion
<i>Cirsium</i> sp. *	Thistle
<i>Cirsium vulgare</i> *	Bull Thistle
<i>Clarkia</i> sp.	Clarkia
<i>Clematis</i> sp.	Clematis

TABLE 2. FLORA AND FAUNA DETECTED - TPM 20820 (continued)

<u>Scientific Name</u>	<u>Common Name</u>
<u>Plants (cont)</u>	
<i>Cneoridium dumosum</i>	Spice Bush
<i>Conyza canadensis</i> *	Common Horseweed
<i>Cordylanthus filifolius</i>	Chaparral Bird's-beak
<i>Corethrogyne filaginifolia</i> var. <i>virgata</i>	Sand Aster
<i>Cryptantha intermedia</i>	Common Cryptantha
<i>Cuscuta ceanothi</i>	Chaparral Dodder
<i>Cynara cardunculus</i> *	Wild Artichoke
<i>Cyperus</i> sp. *	Sedge
<i>Chaenactis artemisiaefolia</i>	White Pincushion
<i>Chamaesyce</i> sp.	Spurge
<i>Chorizanthe procumbens</i>	Prostrate Spineflower
<i>Daucus pusillus</i>	Rattlesnake Weed
<i>Diplacus aurantiacus</i>	San Diego Monkeyflower
<i>Dudleya edulis</i>	Edible Dudleya
<i>Eremocarpus setigerus</i>	Dove Weed
<i>Eriastrum filifolium</i>	Thread-leaf Eriastrum
<i>Eriodictyon crassifolium</i>	Hairy-leaf Yerba Santa
<i>Eriogonum fasciculatum</i>	Flat-top Buckwheat
<i>Eriophyllum confertiflorum</i>	Golden Yarrow
<i>Erodium</i> sp.*	Stork's-bill
<i>Festuca megalura</i> *	Foxtail Fescue
<i>Filago gallica</i> *	Narrow-leaf Filago
<i>Galium angustifolium</i>	Narrow-leaf Bedstraw
<i>Gnaphalium californicum</i>	California Cudweed
<i>Gnaphalium palustre</i>	Cudweed
<i>Haplopappus squarrosus</i>	Hazardia
<i>Hedypnois cretica</i> *	Hedypnois
<i>Helianthemum scoparium</i>	Rock Rose
<i>Heteromeles arbutifolia</i>	Toyon
<i>Heterotheca grandiflora</i> *	Telegraph Weed
<i>Hordeum murinum</i> *	Wild Barley
<i>Hypochaeris glabra</i> *	Smooth Cat's-tongue

TABLE 2. FLORA AND FAUNA DETECTED - TPM 20820 (continued)

<u>Scientific Name</u>	<u>Common Name</u>
<u>Plants (cont)</u>	
<i>Juncus dubius</i>	Doubtful Rush
<i>Lactuca serriola</i> *	Wild Lettuce
<i>Lessingia filaginifolia</i> var. <i>filaginifolia</i>	California Aster
<i>Lomatium dasycarpum</i>	Lomatium
<i>Lonicera subspicata</i>	Wild Honeysuckle
<i>Lotus argophyllus</i>	Silver Lotus
<i>Lotus purshianus</i>	Spanish Clover
<i>Lotus scoparius</i>	Deerweed
<i>Malacothamnus fasciculatus</i>	Bushmallow
<i>Malosma laurina</i>	Laurel Sumac
<i>Marah macrocarpum</i>	Man Root
<i>Melilotus</i> sp. *	Sweet Clover
<i>Muhlenbergia rigens</i>	Deer Grass
<i>Navarretia hamata</i>	Skunkweed
<i>Nicotiana glauca</i> *	Tree Tobacco
<i>Opuntia ficus-indica</i> *	Indian Fig
<i>Opuntia occidentalis</i>	Prickly Pear
<i>Penstemon spectabilis</i>	Showy Penstemon
<i>Perezia microcephala</i>	Sacapellote
<i>Persea americana</i> *	Avocado
<i>Phacelia cicutaria hispida</i>	Caterpillar Phacelia
<i>Picris echioides</i> *	Bristly Ox-tongue
<i>Plagiobothrys</i> sp.	Popcornflower
<i>Platanus racemosa</i>	California Sycamore
<i>Polypogon monspeliensis</i> *	Rabbitfoot Grass
<i>Prunus ilicifolia</i>	Holly-leaf Cherry
<i>Quercus agrifolia</i>	Coast Live Oak
<i>Quercus beberidifolia</i> x <i>engelmannii</i>	Hybrid Oak
<i>Quercus berberidifolia</i>	Interior Scrub Oak
<i>Rhamnus ilicifolia</i>	Redberry
<i>Rhus ovata</i>	Sugarbush
<i>Rumex salicifolius</i>	California Dock

TABLE 2. FLORA AND FAUNA DETECTED - TPM 20820 (continued)

<u>Scientific Name</u>	<u>Common Name</u>
<u>Plants (cont)</u>	
<i>Salix gooddingii</i>	Southwestern Willow
<i>Salix lasiandra</i>	Lance-leaf Willow
<i>Salix</i> sp.	Willow
<i>Salsola pestifer</i> *	Russian Thistle
<i>Salvia columbariae</i> *	Chia
<i>Salvia mellifera</i>	Black Sage
<i>Sambucus mexicanus</i>	Elderberry
<i>Sanicula crassicaulis</i>	Snakeroot
<i>Scrophularia californica</i>	Bee Plant
<i>Selaginella bigelovii</i>	Bigelow's Spikemoss
<i>Silene gallica</i> *	Common Catchfly
<i>Solanum xanti</i>	Chaparral Nightshade
<i>Sonchus asper</i> *	Sow Thistle
<i>Sonchus oleraceus</i> *	Sow Thistle
<i>Spergula arvensis</i> *	Corn Spurry
<i>Stephanomeria virgata</i>	Stephanomeria
<i>Stylocline gnaphalioides</i>	Everlasting Nest-straw
<i>Tamarix</i> sp. *	Salt Cedar
<i>Thalictrum polycarpum</i>	Bush Rue
<i>Toxicodendron diversilobum</i>	Poison Oak
<i>Xanthium strumarium</i> *	Cocklebur
<i>Xylococcus bicolor</i>	Mission Manzanita
<i>Yucca whipplei</i>	Our Lord's Candle
<u>Birds</u>	
<i>Aphelocoma coerulescens</i>	Scrub Jay
<i>Archilochus costae</i>	Costa's Hummingbird
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<i>Callipepla californica</i>	California Quail
<i>Carduelis psaltria</i>	Lesser Goldfinch
<i>Carpodacus mexicanus</i>	Housefinch
<i>Cathartes aura</i>	Turkey Vulture

TABLE 2. FLORA AND FAUNA DETECTED - TPM 20820 (continued)

<u>Scientific Name</u>	<u>Common Name</u>
<u>Birds (cont)</u>	
<i>Chamaea fasciata</i>	Wrentit
<i>Colaptes auratus</i>	Common Flicker
<i>Corvus corax</i>	Common Raven
<i>Corvus brachyrhynchos</i>	Common Crow
<i>Dendroica coronata</i>	Audubon's Warbler
<i>Myiarchus cinerascens</i>	Ash-throated Flycatcher
<i>Phainopepla nitens</i>	Phainopepla
<i>Pipilo erythrophthalmus</i>	Rufous-sided Towhee
<i>Pipilo crissalis</i>	California Towhee
<i>Psaltiriparus minimus</i>	Bushtit
<i>Thryomanes bewickii</i>	Bewick's Wren
<i>Toxostoma redivivum</i>	California Thrasher
<i>Zenaida macroura</i>	Mourning Dove
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow
<u>Mammals</u>	
<i>Canis latrans</i>	Coyote
<i>Lynx rufus</i>	Bobcat
<i>Neotoma fuscipes</i>	Dusky-footed Woodrat
<i>Spermophilus beecheyi</i>	California Ground Squirrel
<i>Sylvilagus audubonii</i>	Desert Cottontail
<i>Thomomys bottae</i>	Valley Pocket Gopher
<i>Urocyon cinereoargenteus</i>	Gray Fox
<u>Reptiles</u>	
<i>Cnemidophorus hyperythrus beldingi</i>	Orange-throated Whiptail
<i>Cnemidophorus tigris multiscutatus</i>	Coastal Whiptail
<i>Masticophis lateralis</i>	Striped Racer
<i>Phrynosoma coronatum blainvillei</i>	San Diego Horned Lizard
<i>Sceloporus occidentalis</i>	Western Fence Lizard
<i>Uta stansburiana</i>	Side-blotched Lizard

TABLE 2. FLORA AND FAUNA DETECTED - TPM 20820 (continued)

<u>Scientific Name</u>	<u>Common Name</u>
<u>Butterflies</u>	
<i>Adelpha bredowii californica</i>	California Sister
<i>Apodemia mormo virgulti</i>	Behr's Metalmark
<i>Artogeia rapae</i>	Cabbage White
<i>Erynnis funeralis</i>	Funereal Duskywing
<i>Nymphalis antiopa</i>	Mourning Cloak
<i>Papilio eurymedon</i>	Pale Swallowtail
<i>Pontia protodice</i>	Common White

Total = 119 species of plants, 41 species of animals detected

* = non-native taxon **bold = sensitive species**

TABLE 3. IMPACT ANALYSIS: HABITATS: TPM 20820, VALLEY CENTER

Biological Resource	Total Onsite	Impacted	Impact Neutral ¹	Mitigation Required	Conserved ¹
Chamise Chaparral	23.8 acres	5.4 acres	0.8 acres	5.4 acres @ 1:1 (13.0 ac excess ²)	18.4 acres in open space (77% of habitat)
Coastal Sage - Chaparral Scrub	3.6 acres	3.6 acres	none	<3.6 acres> @ 1:1 (3.6 ac shortage ²)	none (0% of habitat)
Diegan Coastal Sage Scrub	4.8 acres	1.0 acre	2.0 acres	2.0 acres @ 2:1 (0.2 ac shortage ²)	1.8 acre in open space (38% of habitat)
Non-native Grassland	1.6 acres	0.9 acre	none	0.5 acre ½:1 (0.2 ac excess ²)	0.7 acre in open space (44% of habitat)
Southern Willow Scrub	0.4 acres	none	none	avoidance	0.4 acre in open space (100% of habitat)
Tamarisk Scrub	trace	none	trace	avoidance	trace in open space (100% of habitat)
Southern Coast Live Oak Riparian Forest	0.5 acres	none	none	avoidance	0.5 acres in open space (100% of habitat)
Orchards and Vineyards	none ³	n/a	none	n/a	n/a
Urban/Developed	2.4 acres	2.4 acres	none	none	n/a
Disturbed Habitat	1.9 acres	1.9 acres	none	none	n/a
Totals	39.0 acres	15.2 acres	2.8 acres	--	21.8 acres (60% of site)

¹ Mitigation provided as calculated excludes the acreages within other easements (road, utility, etc) and wetland buffers (100' for SCLORF and 50' for SWS and Tamarisk Scrub). These areas are considered "impact neutral".

² Shortage of CSCS and CSS will be compensated for via the conservation of excess areas of NNG, chaparral, and other habitats to be placed in biological open space.

³ This habitat is located offsite on lands adjoining the property.

TABLE 4. SENSITIVE SPECIES KNOWN FROM THE VICINITY - TPM 20820, VALLEY CENTER

Scientific Name	Common Name	Federally Endangered	Federally Threatened	State Threatened	State Rare	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Probability of Occurrence
<i>Taxidea taxus</i>	American badger					X	X	X		X	X	X		X		X	X			X			L
<i>Bufo microscaphus californicus</i>	Arroyo toad	X				X	X	X	X	X	X									X			L
<i>Amphispiza belli belli</i>	Bell's sage sparrow					X	X				X									X			M
<i>Nyctinomops macrotis</i>	Big free-tailed bat					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	M
<i>Elanus caeruleus</i>	Black-shouldered kite							X	X														M
<i>Rana aurora draytoni</i>	California red -legged frog		X						X						X					X		X	L
<i>Clarkia delicata</i>	Campo Clarkia									x													L
<i>Nolina cismontana</i>	Chaparral beargrass						X				X												L
<i>Salvadora hexalepis virgultea</i>	Coast patch-nosed snake					X	X				X			X									M
<i>Charina trivirgata roseofusca</i>	Coastal rosy boa					X	X			X	X												M
<i>Cnemidophorus tigris multiscutatus</i>	Coastal western whiptail						X		X	X	X												O
<i>Accipiter cooperii</i>	Cooper's hawk							X	X	X													M
<i>Piperia cooperi</i>	Cooper's rein orchid					X	X	X			X												L
<i>Chaetodipus californicus femoralis</i>	Dulzura California pocket mouse					X	X	X		X	X	X											M
<i>Quercus engelmannii</i>	Engelmann oak								X	X													M
<i>Monardella hypoleuca lanata</i>	Felt leaved rock mint						X				X												L
<i>Polygala comuta fishiae</i>	Fish's milkwort						X				X												L
<i>Myotis thysanodes</i>	Fringed myotis						X		X	X	X	X	X	X						X			M
<i>Senecio ganderi</i>	Gander's butterweed				X		X				X												L
<i>Aquila chrysaetos</i>	Golden eagle					X	X	X		X	X	X	X	X									L
<i>Ammodramus savannarum</i>	Grasshopper sparrow							X															L
<i>Eumops perotis californicus</i>	Greater western mastiff bat					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	M
<i>Eremophila alpestris actis</i>	Horned lark							X												X			M
<i>Lanius ludovicianus</i>	Loggerhead shrike					X		X	X	X						X	X						M
<i>Myotis evotis</i>	Long eared myotis						X		X	X	X	X	X	X						X			M
<i>Myotis volans</i>	Long legged myotis						X		X	X	X	X	X	X						X			M
<i>Perognathus longimembris brevisasus</i>	Los Angeles little pocket mouse					X	X	X			X	X									X		L
<i>Danaus plexippus</i>	Monarch butterfly							X		X										X			M
<i>Felis concolor</i>	Mountain lion					X	X		X	X	X	X	X	X		X	X			X			L
<i>Piperia leptopetala</i>	Narrow-petaled rein orchid					X	X	X															L
<i>Crotalus ruber ruber</i>	Northern red diamond rattlesnake					X	X				X			X		X							M
<i>Cnemidophorus hyperythrus</i>	Orange-throated whiptail					X	X	X	X		X												O

TABLE 4. SENSITIVE SPECIES KNOWN FROM THE VICINITY - TPM 20820, VALLEY CENTER

Scientific Name	Common Name	Federally Endangered	Federally Threatened	State Threatened	State Rare	Coastal Sage Scrub	Mixed Chaparral	Grassland	Riparian	Oak Woodland	Chamise Chaparral	Mixed Conifer	Closed Cone Forest	Piñon-Juniper	Freshwater Marsh	Desert Scrub	Desert Wash	Salt or Alkali Marsh	Vernal Pools	Montane Meadow	Coastal or Desert Dune	Lakes and Bays	Probability of Occurrence
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea							X	X	X	X								X				L
<i>Antrozous pallidus</i>	Pallid bat					X	X	X	X	X	X	X	X	X		X	X				X		M
<i>Harpagonella palmeri</i>	Palmer's grappling hook					X		X			X												L
<i>Tetracoccus dioicus</i>	Parry's tetracoccus						X				X												L
<i>Chorizanthe leptotheca</i>	Peninsular spine flower						X				X												L
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	M
<i>Horkelia truncata</i>	Ramona horkelia						X																L
<i>Buteo lineatus</i>	Red-shouldered hawk								X	X													M
<i>Bassariscus astutus</i>	Ringtail						X				X												L
<i>Aimophila ruficeps canescens</i>	Rufous-crowned sparrow					X					X												M
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko					X		X			X												M
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit					X	X	X		X	X	X	X										M
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat					X			X	X	X												M
<i>Phrynosoma coronatum blainvillei</i>	San Diego horned lizard					X	X	X	X		X	X											O
<i>Diadophis punctatus similis</i>	San Diego ringneck snake					X	X		X	X	X	X	X										M
<i>Accipiter striatus</i>	Sharp-shinned hawk					X				X		X											M
<i>Anniella pulchra pulchra</i>	Silvery legless lizard					X		X	X												X		M
<i>Myotis ciliolabrum</i>	Small-footed myotis						X		X	X	X	X	X	X			X			X			M
<i>Thamnophis sirtalis ssp. Novum</i>	South Coast garter snake								X						X								L
<i>Onychomys torridus ramona</i>	Southern grasshopper mouse					X	X	X			X												L
<i>Chamaebatia australis</i>	Southern mountain misery						X				X												L
<i>Odocoileus hemionus</i>	Southern mule deer					X	X	X	X	X	X	X	X	X		X	X			X			M
<i>Dipodomys stephensi</i>	Stephen's kangaroo rat	X		X		X		X															L
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat						X	X	X	X	X	X	X	X		X	X			X			M
<i>Agelaius tricolor</i>	Tricolored blackbird							X	X						X								L
<i>Cathartes aura</i>	Turkey vulture					X	X	X	X	X	X	X	X										O
<i>Sialia mexicana</i>	Western bluebird								X	X													M
<i>Lasiurus blossevillei</i>	Western red bat								X	X		X	X							X			M
<i>Icteria virens</i>	Yellow-breasted chat								X														M
<i>Myotis yumanensis</i>	Yuma myotis					X	X	X	X	X	X	X	X	X	X			X	X	X		X	M

PROBABILITY OF OCCURRENCE CODES FOR TABLE 4

L – Low Probability; rare species in area, and no significant habitat (animals), *or* distinctive perennial that would not have been missed if present onsite (plants). Most of these species occur on habitat not found on the TPM 20820 site, including vernal pools, native grasslands, mafic soils, etc. California Red-legged Frogs and Tricolored Blackbird are two examples of species that fit into this category. Both are very rare in southern California.

M – Moderate Probability; could be expected to occur onsite on at least an occasional basis, based on habitat quality (animals), *or* could occur onsite, but rare, and/or poorly known (plants). Most of these species occur in habitat similar to that found onsite, although they may or may not utilize the TPM 20820 property. Native bats and uncommon but cryptic reptiles are examples of species that have a moderate probability of occurring onsite.

H – High Probability; certain to occur onsite on a regular basis (animals), but cryptic, *or* ephemeral species known from the immediate vicinity, but seasonal in occurrence (plants). Most of these species are expected to use the site, but are difficult to reliably detect. Examples include various fossorial reptiles, wide-ranging predators, etc.

O – Observed; see text for detailed discussion.

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**ATTACHMENT A. CNDDDB FORMS AS SUBMITTED TO
CALIFORNIA DEPARTMENT OF FISH AND GAME**

(to be provided with final iteration)

